

WHAT IS CLAIMED IS:

1. A low noise down-converter for satellite broadcast receiving, comprising a mixer converting a received high-frequency signal into an intermediate-frequency signal,
said mixer including
5 a transistor performing frequency conversion,
 a first bipolar transistor having an emitter connected to a drain of
said transistor and a collector connected to a gate of said transistor, and
 a temperature characteristic compensating circuit connected to a
base of said first bipolar transistor and canceling a temperature
characteristic of said first bipolar transistor.
- 10 2. The low noise down-converter according to claim 1, wherein
 said temperature characteristic compensating circuit includes a
second bipolar transistor having a conductive terminal connected to the base
of said first bipolar transistor.
3. The low noise down-converter according to claim 2, wherein said
first and second bipolar transistors are packaged into a dual transistor.